



1 INDUSTRIAL AVE,
STATE 3
MORRIS PLAZA NJ 07430
PHONE: 201.684.0055
FAX: 201.684.0066

April 2, 2022

Members of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Notice of Exempt Modification
218 Wheeler Road AKA Richard Road, Torrington, CT 06790
Latitude: 41.465033
Longitude: -73.81002
T-Mobile Site#: CT11369A - Hardening

Dear Ms. Bachman:

T-Mobile currently maintains twelve (12) antennas at the 160-foot level of the existing 160-foot monopole tower at 218 Wheeler Road AKA 2 Richard Road, Torrington, CT. The 160-foot monopole tower is owned by Crown Castle and the property is owned by Lucille G. Lefebvre. T-Mobile now intends to add a 48Kw generator to a proposed concrete pad within the existing compound.

Planned Modifications:

Ground:

Install New:

(1) Generac RD048 48 Kw AC Diesel Generator. Requires (2) 12-minute run cycles by-weekly.

The original approval documents were not able to be located at the time of this application. Nonetheless, the Council has approved several exempt modifications for all carriers since the tower came under the Council's jurisdiction. We maintain this modification constitutes an exempt modification regardless of the approval conditions.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16- SOj-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-SOj-73, a copy of this letter is being sent to Mayor Elinor Carbone, Elected Official, and Jeremy Leifert, City Planner, as well as the tower and property owner.

The planned modifications to the facility fall squarely within those activities explicitly provided for in

R.C.S.A. § 16-50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

For the foregoing reasons, T-Mobile respectfully submits that the proposed modifications to the above referenced telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Eric Breun

Transcend Wireless

Cell: 201-658-7728

Email: ebreun@transcendwireless.com

Attachments

cc: Elinor Carbone - Mayor of Torrington

Jeremy Leifert - City Planner

Crown Castle - Tower Owner

Lucille G. Lefebvre - Property Owner

ERIC BREUN
2016587728
1 INTERNATIONAL BLVD.
MAHWAH NJ 07495

1 LBS

1 OF 1

SHIP TO:
JEREMY LEIFERT
140 MAIN STREET
TORRINGTON CT 06790

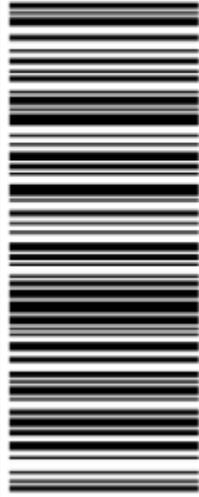


CT 067 9-02



UPS GROUND

TRACKING #: 1Z V25 742 03 9621 7955



BILLING: P/P

Reference #1: CT11369A

XOL 22.03.13 NV95 14.0A 03/2022*



TM

ERIC BREUN
2016587728
1 INTERNATIONAL BLVD.
MAHWAH NJ 07495

1 LBS

1 OF 1

SHIP TO:
MAYOR ELINOR CARBONE
140 MAIN STREET
TORRINGTON CT 06790



CT 067 9-02



UPS GROUND

TRACKING #: 1Z V25 742 03 9530 7949



BILLING: P/P

Reference #1: CT11369A

XOL 22.03.13 NV95 14.0A 03/2022*



TM

ERIC BREUN
2016587728
1 INTERNATIONAL BLVD.
MAHWAH NJ 07495

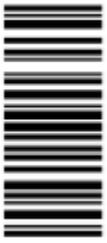
1 LBS

1 OF 1

SHIP TO:
VOICESTREAM WIRELESS CORP
LUCILLE LEFEBVRE
OLD WASHINGTON ROAD
CANONSBURG PA 15317

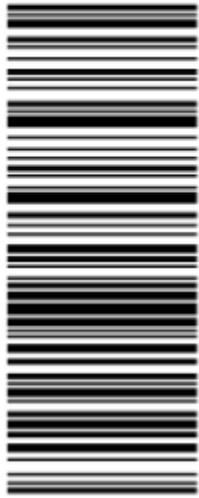


PA 153 0-10



UPS GROUND

TRACKING #: 1Z V25 742 03 9809 7975



BILLING: P/P

Reference #1: CT11369A

XOL 22.03.13 NV45 14.0A 03/2022*



TM

ERIC BREUN
2016587728
1 INTERNATIONAL BLVD.
MAHWAH NJ 07495

1 LBS

1 OF 1

SHIP TO:
ATTN: LICENSING DOCUMENT EXECUTION
CROWN CASTLE USA
2000 CORPORATE DRIVE
CANONSBURG PA 15317



PA 153 0-10



UPS GROUND

TRACKING #: 1Z V25 742 03 9714 7967



BILLING: P/P

Reference #1: CT11369A

XOL 22.03.13 NV45 14.0A 03/2022*



TM

Hello, your package has been delivered.

Delivery Date: Wednesday, 03/30/2022

Delivery Time: 2:25 PM

Signed by: LEWIS

TRANSCEND WIRELESS

Tracking Number: [1ZV257420396217955](#)

Ship To: JEREMY LEIFERT
140 MAIN STREET
TORRINGTON, CT 06790
US

Number of Packages: 1

UPS Service: UPS Ground

Package Weight: 1.0 LBS

Reference Number: [CT11369A](#)

Hello, your package has been delivered.

Delivery Date: Wednesday, 03/30/2022

Delivery Time: 2:25 PM

Signed by: LEWIS

TRANSCEND WIRELESS

Tracking Number: [1ZV257420395307949](#)

Ship To: MAYOR ELINOR CARBONE
140 MAIN STREET
TORRINGTON, CT 06790
US

Number of Packages: 1

UPS Service: UPS Ground

Package Weight: 1.0 LBS

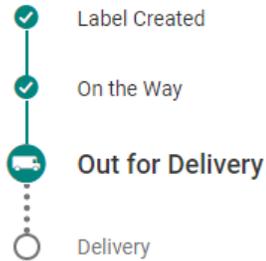
Reference Number: [CT11369A](#)

Your shipment from

TRANSCEND WIRELESS

Estimated delivery

Today, March 31 between 9:15 A.M. - 11:15 A.M. [?](#)



Ship To

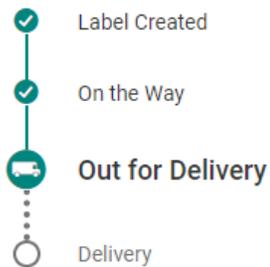
LUCILLE LEFEBVRE
VOICESTREAM WIRELESS CORP
OLD WASHINGTON ROAD
CANONSBURG, PA 15317 US

Your shipment from

TRANSCEND WIRELESS

Estimated delivery

Today, March 31 between 9:30 A.M. - 11:30 A.M. [?](#)



Ship To

CROWN CASTLE USA
ATTN: LICENSING DOCUMENT EXECUTION
2000 CORPORATE DRIVE
CANONSBURG, PA 15317 US

Parcel Information

Location:	RICHARD RD	Property Use:	Vacant Land	Primary Use:	Land with Outbuildings
Unique ID:	15376	Map Block Lot:	235/001/014/2	Acres:	1.62
490 Acres:	0.00	Zone:	R40	Volume / Page:	0428/0999
Developers Map / Lot:	4570/4592	Census:	5		
Location:	RICHARD RD	Property Use:	Vacant Land	Primary Use:	Land with Outbuildings
Unique ID:	15376	Map Block Lot:	235/001/014/2	Acres:	1.62
490 Acres:	0.00	Zone:	R40	Volume / Page:	0428/0999
Developers Map / Lot:	4570/4592	Census:	5		

Value Information

	Appraised Value	Assessed Value
Land	72,671	50,870
Buildings	12,106	8,470
Detached Outbuildings	20,023	14,020
Total	104,800	73,360

Owner's Information

Owner's Data
LEFEBVRE LUCILLE G DBA.VOICESTREAM WIRELESS CORP PMB 331 4017 WASHINGTON RD MCMURRAY, PA 15317

Building 1

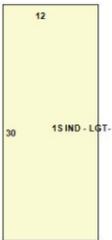


Category:	Industrial	Use:	Light Industrial	GLA:	360
Stories:	1.00	Construction:	Reinforced Concrete	Year Built:	2004
Heating:		Fuel:		Cooling Percent:	0
Siding:	Pre-Cast Concrete	Roof Material:		Beds/Units:	0

Special Features

Generator	1
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Attached Components



Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Fencing	2004	0.00	0.00	240
Concrete Block/Fr Garage	2009	0.00	0.00	360
Concrete Block/Fr Garage	2009	0.00	0.00	240

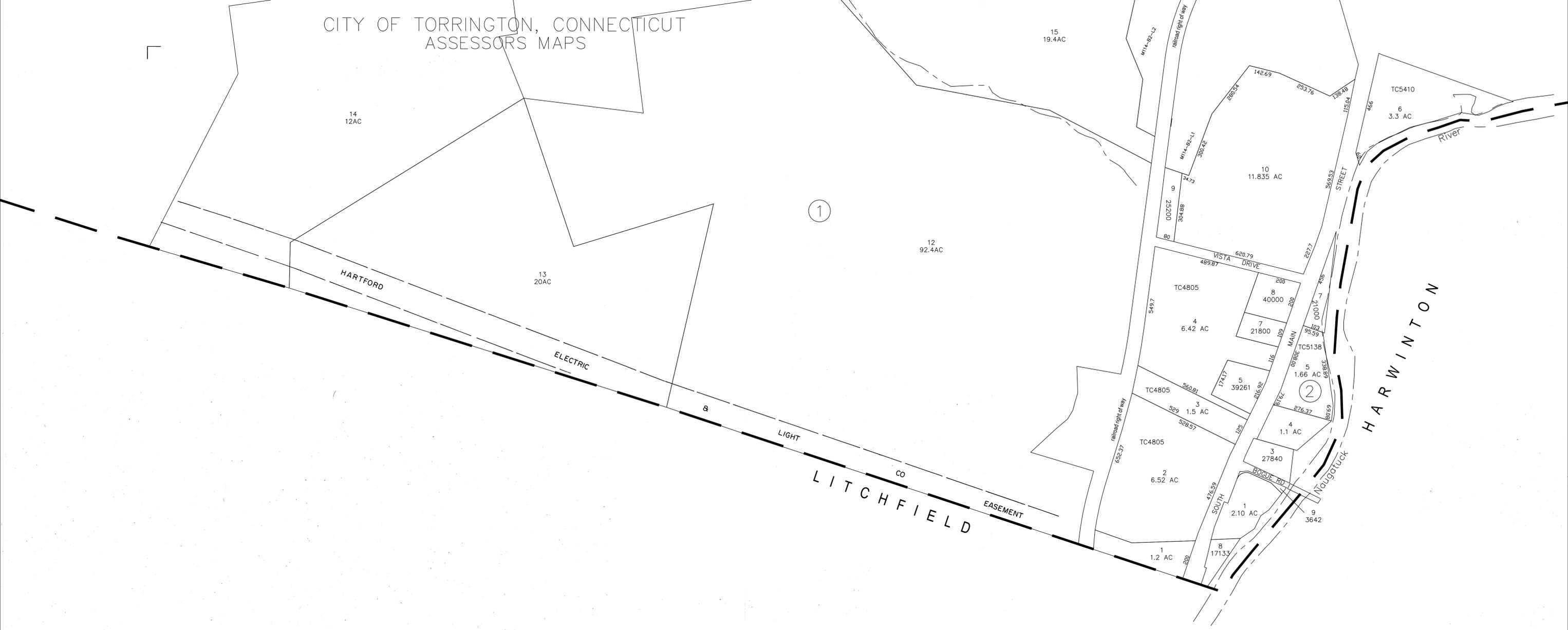
Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
LEFEBVRE LUCILLE G	0428	0999	01/21/1988	Probate	\$0

Building Permits

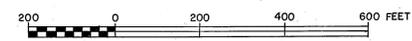
Permit Number	Permit Type	Date Opened	Reason
20-416 BP	Building	10/02/2020	REPL 6 ANTENNAS & ADD 3 NEW ANTENNAS
20-95 Z	Commercial	09/17/2020	CELL TOWER ANTENNA UPGRADES
20-133 EL	Electrical	05/05/2020	GENERATOR SYSTEM FOR AT&T CELL SITE
18-890 Z	Commercial	06/01/2018	REPL 3 WIRELESS ANTENNAS & ADD 3 REMOTE RADIO UNITS= PP
17-2463	Building	12/19/2017	SPRINT TO ADD (3) ANTENNAS & RRU'S= PP
17-2397 Z	Commercial	12/05/2017	SPRINT TO ADD 3 ANTENNAS & 3 RRH'S= PP
14-2183	Building	10/23/2014	ADDING 3 ANTENNA =PP
13-5674	Certificate of Completion	08/22/2013	CERT OF COMPL-NEW ANTENNAE & REMOTE RADIO HEADS
13-5388	Building	07/19/2013	MODIFY EXISTING SPRINT FACILITY
13-4416	Building	04/08/2013	ADD'L CABINETS & CONC SLAB TO EXISTING FACILITY
12-3175	Building	01/04/2013	ADD NEW ANTENNA & REMOTE HEADS(AT &T)
12-2941	Building	11/21/2012	REPL 12 ANTENNAS W/NEW ANTENNAS
13-5639	Building	11/21/2012	REPL 12 ANTENNA
13-5639	Building	11/21/2012	REPL 12 ANTENNA W/NEWER
09-584	Certificate of Completion	05/07/2009	CERT OF COMPL/6 ANTENNAS, EQUIP SHED
08-1211	Commercial	10/03/2008	INSTALL 6 ANTENNAS EQUIPMENT SHED AND RELATED TELECOMMUNICATION EQUIPMENT ON EXISTING COMPOUND ANTEN
04-09	Building	01/08/2004	WIRELESS ANTENNAS/SHELTER

CITY OF TORRINGTON, CONNECTICUT
ASSESSORS MAPS



DS	APR 2019	Update AC 235/1/10
DS	OCT 2017	Add 235/2/9
DS	NOV 2012	Add 235/2/8
DS	NOV 2012	Merge 235/2/1 & 2
DS	OCT 2012	Update 235/2/6
IM	MAR 2008	Ref to 114/2/1
IM	APR 2007	Revise 235/2/5
RT	OCT 2005	Ref to 114/2/42 & 43
MZ	JAN 2005	Rd name change Vista Dr
REV	DEC 2003	UPDATED MAP
REV	JULY 2003	ADJ. TO MATCH M113+M114
REV	DEC 2002	UPDATED MAP
REV	OCT 2001	REVISED LOT 2 IN BL 1
REV	DEC 2000	UPDATED MAP
REV	JULY 1999	UPDATED MAP
REV	JULY 1999	UPDATED MAP 235
REV	DATE	REVISION

PREPARED UNDER THE DIRECTION OF
C. BARTON SMITH - ASSESSOR
BY
AVIS AIRMAP, INC.



219	113/114
218	235

AVIS PROJ. No. 7454



BACKUP POWER GENERATOR						
EQUIPMENT	POWER GENERATED	FUEL	MODEL NUMBER	FUEL TANK SIZE (GAL)	DIMENSIONS	WEIGHT
MAKE: GENERAC MODEL: RD48	48 KW, AC	DIESEL	7194	229	103.4"L x 35.0"W x 91.7"H	2915 LBS.

NOTES:

- FUEL LEVEL/SECONDARY CONTAINMENT SHALL BE ALARMED AND IN COMMUNICATION WITH T-MOBILE'S NOC.
- CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION AND ALL OPTIONAL FEATURES WITH T-MOBILE'S CONSTRUCTION MANAGER PRIOR TO ORDERING.

1 PROPOSED GENERATOR DETAIL
C-3 SCALE: NOT TO SCALE



NFPA 704 HAZARD ID LEGEND:
 RED: FLAMMABILITY
 BLUE: HEALTH
 YELLOW: REACTIVITY
 WHITE: BLANK

SIGN NAME: REGULATORY, NFPA 704 HAZARD ID
DESCRIPTION: MOUNT ON GENERATOR ACCESS DOOR. CONSULT WITH GENERATOR MANUFACTURER MSDS SHEET FOR BLUE AND RES POSITIONS
NOTES:

- SIGNS EXPOSED TO WEATHER SHOULD BE CHECKED ANNUALLY FOR READABILITY.
- SIGNS MUST BE UPDATED IF CHEMICAL STORAGE OR HAZARD INFORMATION FOR THE LOCATION CHANGES.
- THE GC MUST REVIEW WITH LOCAL JURISDICTION WHEN FILLING FOR PERMITS, AS EACH JURISDICTION MAY HAVE DIFFERENT REQUIREMENTS AND COMPLY WITH POSTING REQUIREMENTS OR DIRECTIVES FROM THE LOCAL JURISDICTION.

2 NFPA 704 DIAMOND SIGNAGE DETAIL
C-3 SCALE: NOT TO SCALE

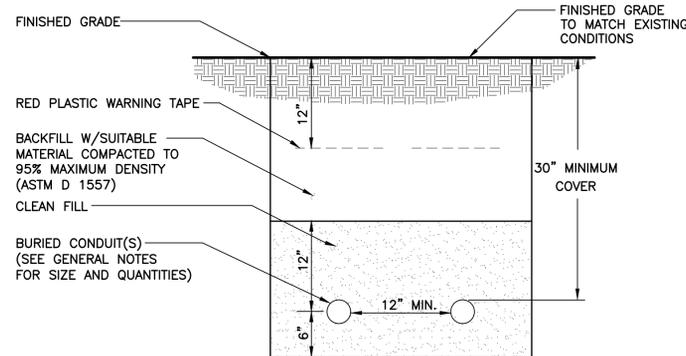


AUTOMATIC TRANSFER SWITCH					
EQUIPMENT	PHASE	VOLTAGE	ENCLOSURE	AMP	DIMENSIONS
MAKE: GENERAC MODEL: RXSC200A3	1-PHASE	120/240	NEMA-3R	200	17.3"L x 12.5"W

NOTES:

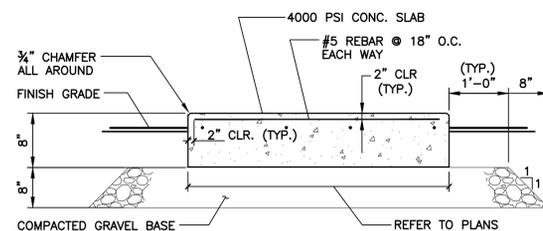
- CONTRACTOR TO COORDINATE FINAL LOCATION AND MOUNTING CONFIGURATION OF THE AUTOMATIC TRANSFER SWITCH INSTALLATION.

3 AUTOMATIC TRANSFER SWITCH DETAIL
C-3 SCALE: NOT TO SCALE

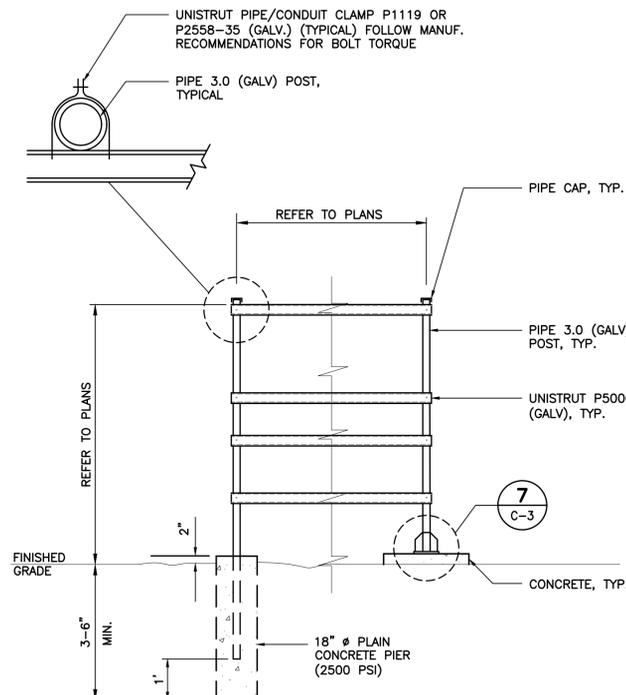


- NOTES:**
- THE CLEAN FILL SHALL PASS THROUGH A 3/8" MESH SCREEN AND SHALL NOT CONTAIN SHARP STONES. OTHER BACKFILL SHALL NOT CONTAIN ASHES, CINDERS, SHELLS, FROZEN MATERIAL, LOOSE DEBRIS OR STONES LARGER THAN 2" IN MAXIMUM DIMENSION.
 - WHERE EXISTING UTILITIES ARE LIKELY TO BE ENCOUNTERED, CONTRACTOR SHALL HAND DIG AND PROTECT EXISTING UTILITIES.

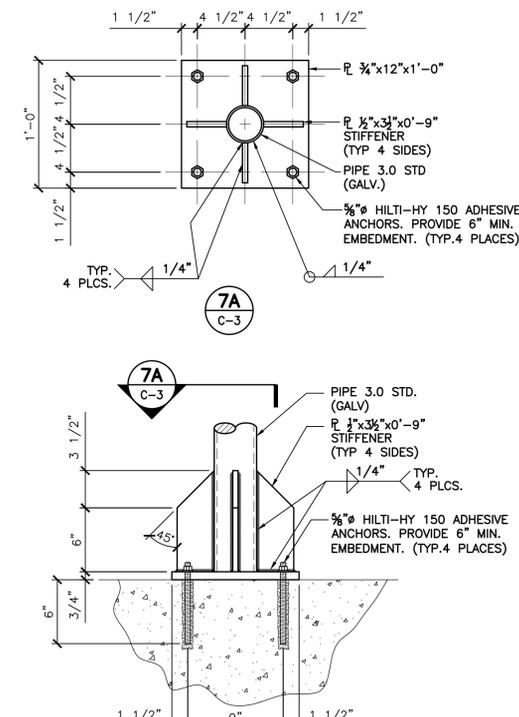
4 TYPICAL ELECTRICAL/TEL TRENCH DETAIL
C-3 SCALE: NOT TO SCALE



5 TYPICAL CONCRETE PAD DETAIL
C-3 SCALE: NOT TO SCALE

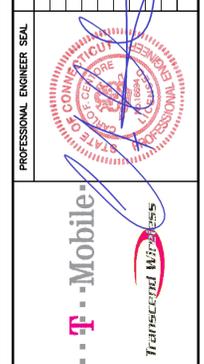


6 TYPICAL FRAME MOUNTING DETAIL
C-3 SCALE: NOT TO SCALE



7 FRAME TO CONCRETE CONNECTION DETAIL
C-3 SCALE: NOT TO SCALE

REV.	DATE	BY	DESCRIPTION
0	03/25/22	RTS	CONSTRUCTION DRAWINGS - ISSUED FOR CONSTRUCTION
		DRWN	BY CHK'D BY



CENTEK engineering
 203 488-0580
 203 488-5587 Fax
 652 North Branford Road
 Branford, CT 06405
 www.CentekEng.com

T-MOBILE NORTHEAST LLC
SITE NAME: TORRINGTON/RT 8
SITE ID: CT11369A
218 WHEELER ROAD
TORRINGTON, CT

DATE: 02/23/22
 SCALE: AS NOTED
 JOB NO. 22015.07

TYPICAL EQUIPMENT DETAILS

Protector™ Series

Diesel Generator Set

INCLUDES:

- Two Line LCD Multilingual Digital Evolution™ Controller (English/Spanish/French/Portuguese) with external viewing window for easy indication of generator status and breaker position.
- Isochronous Electronic Governor
- Sound Attenuated Aluminum Enclosure
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- ±1% Voltage Regulation
- Integrated Base Tank Provides Up to 40 Hours of Run Time
- 5 Year Limited Warranty*
- UL 2200 / UL142 / ULC S601 Listed
- Meets code requirements for External Vent and Fill

Standby Power Rating

- Model RD015 - 15 kW 60 Hz
- Model RD020 - 20 kW 60 Hz
- Model RD030 - 30 kW 60 Hz
- Model RD048 - 48 kW 60 Hz (single phase only)
- Model RD050 - 50 kW 60 Hz (three phase only)



QUIET-TEST



*Built in the USA using domestic and foreign parts

Meets EPA Emission Regulations
CA/MA Emissions Compliant

* 5 year warranty applicable to U.S. and Territories/Canada. International warranty is 3 year limited.

FEATURES

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at ±1%.
- **TEST CRITERIA:**
 - ✓ PROTOTYPE TESTED
 - ✓ SYSTEM TORSIONAL TESTED
 - ✓ NEMA MG1-22 EVALUATION
 - ✓ MOTOR STARTING ABILITY
- **SINGLE SOURCE SERVICE RESPONSE** from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

15 • 20 • 30 • 48 • 50 kW**application & engineering data****GENERATOR SPECIFICATIONS**

Type	Synchronous
Rotor Insulation Class	H (15 & 20 kW) or F (30, 48 & 50 kW)
Stator Insulation Class	H
Telephone Interference Factor (TIF)	<50
Alternator Output Leads 1-Phase	3 wire
Alternator Output Leads 3-Phase	6 wire
Bearings	Single Sealed Cartridge
Coupling	Direct, Flexible Disc
Excitation System	Direct

VOLTAGE REGULATION

Type	Electronic
Sensing	Single Phase
Regulation	± 1%
Features	Adjustable Voltage & Gain

GOVERNOR SPECIFICATIONS

Type	Electronic Isochronous
Steady State Regulation	± 0.25%

ELECTRICAL SYSTEM

Battery Charge Alternator	50 Amp (15 & 20 kW) or 70 Amp (30, 48 & 50 kW)
Smart Battery Charger	2 Amp
Recommended Battery (battery not included)	Group 27F, 700 CCA
System Voltage	12 Volts

GENERATOR FEATURES

Revolving field heavy duty generator
 Directly connected to the engine
 Operating temperature rise 120°C above a 40°C ambient
 Class H insulation is NEMA rated
 Class F insulation is NEMA rated
 All models fully prototype tested

ENCLOSURE FEATURES

Aluminum weather protective enclosure	Ensures protection against mother nature. Electrostatically applied textured epoxy paint for added durability.
Enclosed critical grade muffler	Quiet, critical grade muffler is mounted inside the unit to prevent injuries and maximize sound dampening.
Small, compact, attractive	Makes for an easy, eye appealing installation.
SAE	Sound attenuated enclosure ensures quiet operation.

(All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271)

15 • 20 • 30 • 48 • 50 kW

application & engineering data

ENGINE SPECIFICATIONS: 15 & 20 kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.28
Bore (in./mm)	3.46/88
Stroke (in./mm)	3.70/94
Compression Ratio	21.3:1
Intake Air System	Naturally Aspirated
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

ENGINE SPECIFICATIONS: 30 kW

Make	Generac
Model	In-line
Cylinders	4
Displacement (Liters)	2.4
Bore (in./mm)	3.54/90
Stroke (in./mm)	3.70/94
Compression Ratio	21.3:1
Intake Air System	Turbocharged
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

ENGINE SPECIFICATIONS: 48/50 kW

Make	Generac
Model	In-Line
Cylinders	4
Displacement (Liters)	3.4
Bore in/mm	3.86/98
Stroke in/mm	4.45/113
Compression Ratio	18.5:1
Intake Air System	Turbocharged/Aftercooled
Cylinder Head Type	Cast Iron OHV
Piston Type	Aluminum
EPA Emissions Compliance	Emergency Stationary

WEIGHTS AND DIMENSIONS

	15 kW	20 kW	30 kW	48 kW	50 kW
Weight (lb/kg)	1380/626		1927/874	2197/997	
Dimensions (LxWxH) (in/cm)	81 x 31 x 50/205 x 78 x 128		95 x 35 x 57/242 x 89 x 145		

ENGINE LUBRICATION SYSTEM

Oil Pump Type	Gear
Oil Filter Type	Full flow spin-on canister
Crankcase Capacity (quarts/liters)	6.87/6.5 - 15 & 20 kW
	6.8/6.4 - 30 kW
	7.4/7 - 48 & 50 kW

ENGINE COOLING SYSTEM

Type	Pressurized radiator - 15 & 20 kW Closed recovery - 30, 48 & 50 kW
Water Pump	Pre-lubed, self-sealing
Fan Speed (rpm)	1800 - 15 & 20 kW
	2061 - 30 kW
	2029 - 48 & 50 kW
Fan Diameter (in./mm)	18.11/460 (15 & 20 kW) 22/559 (30, 48 & 50 kW)
Fan Mode	Pusher

FUEL SYSTEM

Fuel Type	Ultra Low Sulfur Diesel Fuel
Fuel Pump Type	Mechanical Engine Driven Gear
Injector Type	Mechanical
Fuel Supply Line (mm/in)	7.94/0.31 (ID)
Fuel Return Line (mm/in)	7.94/0.31 (ID)
Fuel Specification	ASTM
Fuel Filtering (microns)	5 - 15, 20 & 30 kW
	10 - 48 & 50 kW

TANK SPECIFICATIONS

Total Size (gallons/liters)	34/128.7 - 15 & 20 kW
	62/234.7 - 30, 48 & 50 kW
Usable Size (gallons/liters)	32/121.1 - 15 & 20 kW
	57/215.8 - 30, 48 & 50 kW
Run Time @ 1/2 Load (hrs)	41 - 15 kW
	31 - 20 kW
	38 - 30 kW
	25 - 48 & 50 kW
Listings	UL142
	ULC-S601

15 • 20 • 30 • 48 • 50 kW

operating data

GENERATOR OUTPUT VOLTAGE/kW - 60 Hz

		kW (Standby)	Amp (Standby)	CB Size
RD015	120/240 V, 1Ø, 1.0 pf	15	62	70
	120/208 V, 3Ø, 0.8 pf	15	52	60
	120/240 V, 3Ø, 0.8 pf	15	45	50
RD020	120/240 V, 1Ø, 1.0 pf	20	83	100
	120/208 V, 3Ø, 0.8 pf	20	69	80
	120/240 V, 3Ø, 0.8 pf	20	60	70
RD030	120/240 V, 1Ø, 1.0 pf	30	125	150
	120/208 V, 3Ø, 0.8 pf	30	104	125
	120/240 V, 3Ø, 0.8 pf	30	90	100
	277/480 V, 3Ø, 0.8 pf	30	45	50
RD048/ RD050	120/240 V, 1Ø, 1.0 pf	48	200	200
	120/208 V, 3Ø, 0.8 pf	50	173	200
	120/240 V, 3Ø, 0.8 pf	50	150	175
	277/480 V, 3Ø, 0.8 pf	50	75	90

SURGE CAPACITY IN AMPS

		Voltage Dip @ < .4 pf	
		15%	30%
RD015	120/240 V, 1Ø	53	129
	120/208 V, 3Ø	37	90
	120/240 V, 3Ø	32	78
RD020	120/240 V, 1Ø	87	211
	120/208 V, 3Ø	59	143
	120/240 V, 3Ø	51	124
RD030	120/240 V, 1Ø	66	168
	120/208 V, 3Ø	59	144
	120/240 V, 3Ø	51	125
	277/480 V, 3Ø	26	64
RD048/ RD050	120/240 V, 1Ø	69	189
	120/208 V, 3Ø	90	218
	120/240 V, 3Ø	78	189
	277/480 V, 3Ø	36	87

ENGINE FUEL CONSUMPTION

		gal/hr	L/hr
RD015	25% of rated load	0.51	1.93
	50% of rated load	0.79	2.99
	75% of rated load	1.14	4.31
	100% of rated load	1.48	5.58
RD020	25% of rated load	0.67	2.6
	50% of rated load	1.05	3.97
	75% of rated load	1.52	5.32
	100% of rated load	1.98	7.48
RD030	25% of rated load	0.92	3.5
	50% of rated load	1.45	5.5
	75% of rated load	1.96	7.4
	100% of rated load	2.74	10.4
RD048/ RD050	25% of rated load	1.35	5.11
	50% of rated load	2.15	8.14
	75% of rated load	3.06	11.58
	100% of rated load	3.98	15.07

STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.

15 • 20 • 30 • 48 • 50 kW

operating data

ENGINE COOLING

	15 kW	20 kW	30 kW	48/50 kW
Air flow (inlet air including alternator and combustion air in cfm/cmm)	2824/80	2824/80	3038/86	2824/80
System coolant capacity (gal/liters)	2.8/10.6	2.8/10.6	2.8/10.6	2.8/10.6
Heat rejection to coolant (BTU per hr/MJ per hr)	63,535/67	63,535/67	111,000/117.1	135,900/143.4
Maximum operation air temperature on radiator (°C/°F)	50/122			
Maximum ambient temperature (°C/°F)	50/122			

COMBUSTION REQUIREMENTS

Flow at rated power (cfm/cmm)	84.76/2.4	84.76/2.4	90/2.55	190/5.38
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SOUND EMISSIONS

Sound output in dB(A) at 23 ft (7 m) with generator in exercise mode*	65
Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load*	70

*Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters.

EXHAUST

Exhaust flow at rated output (cfm/cmm)	98.88/2.8	98.88/2.8	230/6.51	448/12.7
Exhaust temperature at rated output (°C/°F)	604.4/1120	604.4/1120	454.4/850	604.4/1120

ENGINE PARAMETERS

Rated Synchronous RPM	1800			
HP at rated kW	26.4	33.5	49	85

POWER ADJUSTMENT FOR AMBIENT CONDITIONS

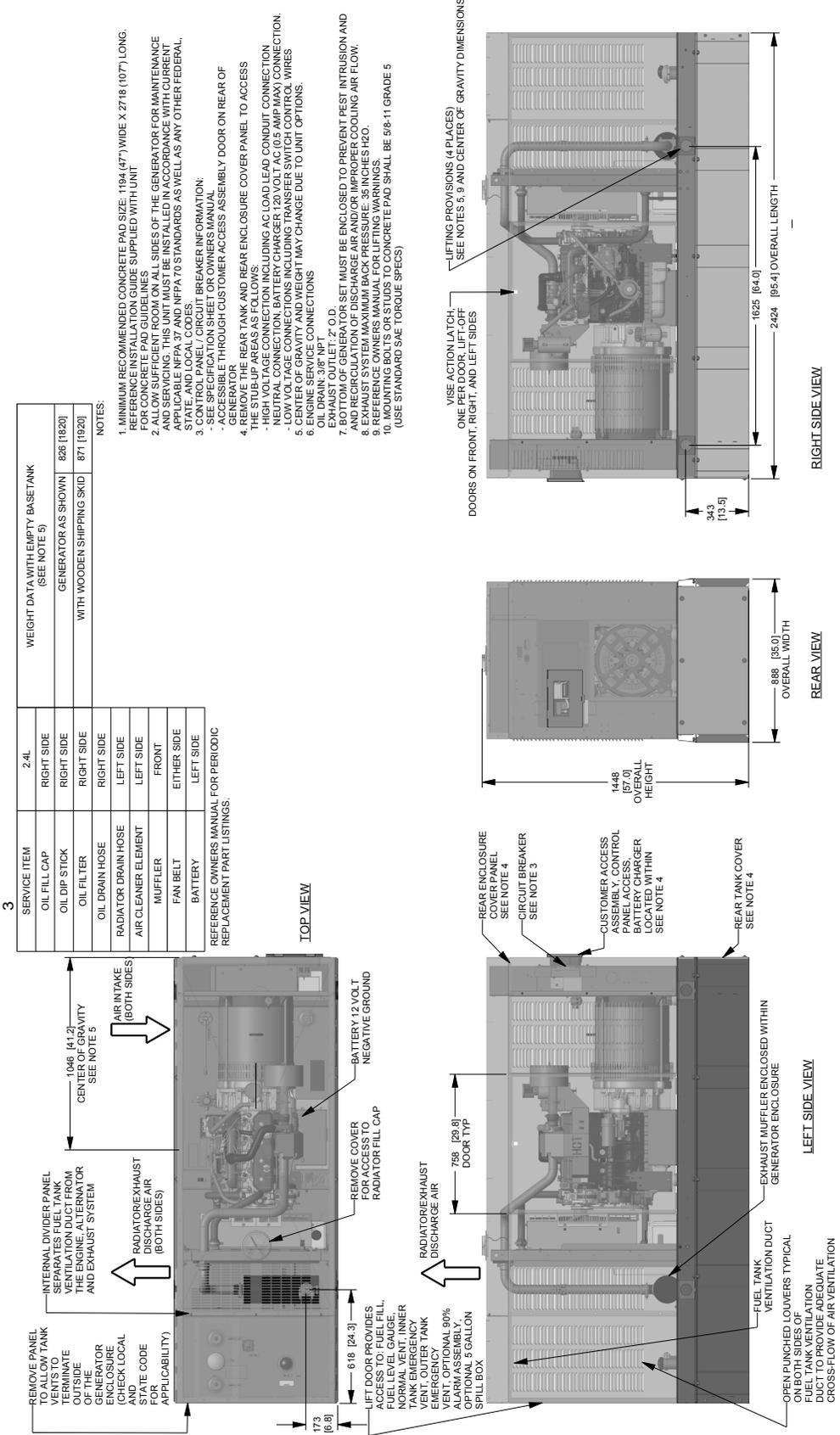
Temperature Deration	3% for every 5 °C above 25 °C or 1.7% for every 5 °F above 77 °F
Altitude Deration (15, 30, 48 & 50 kW)	1% for every 100 m above 915 m or 3% for every 1000 ft above 3000 ft
Altitude Deration (20 kW)	1% for every 100 m above 305 m or 3% for every 1000 ft above 1000 ft

CONTROLLER FEATURES

2-Line Plain Text Multilingual LCD Display	Simple user interface for ease of operation.
Mode Buttons: Auto	Automatic Start on Utility failure. Programmable 7 day exerciser.
Manual	Start with starter control, unit stays on. If utility fails, transfer to load takes place.
Off	Stops unit. Power is removed. Control and charger still operate.
Ready to Run/Maintenance Messages	Standard
Engine Run Hours Indication	Standard
Programmable start delay between 2-1500 seconds	Standard (programmable by dealer only)
Utility Voltage Loss/Return to Utility Adjustable	From 140-171 V/190-216 V
Future Set Capable Exerciser/Exercise Set Error Warning	Standard
Run/Alarm/Maintenance Logs	50 Events Each
Engine Start Sequence	Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration).
Starter Lock-out	Starter cannot re-engage until 5 sec after engine has stopped.
Smart Battery Charger	Standard
Charger Fault/Missing AC Warning	Standard
Low Battery/Battery Problem Protection and Battery Condition Indication	Standard
Automatic Voltage Regulation with Over and Under Voltage Protection	Standard
Under-Frequency/Overload/Stepper Overcurrent Protection	Standard
Safety Fused/Fuse Problem Protection	Standard
Automatic Low Oil Pressure/High Oil Temperature Shutdown	Standard
Overcrank/Overspeed (@ 72 Hz)/RPM Sense Loss Shutdown	Standard
High Engine Temperature Shutdown	Standard
Internal Fault/Incorrect Wiring Protection	Standard
Common External Fault Capability	Standard
Field Upgradable Firmware	Standard

30 kW

Drawing #0K7002-C (1 of 2)



3

SERVICE ITEM	24L	RIGHT SIDE	FRONT	EITHER SIDE	LEFT SIDE					
OIL FILL CAP										
OIL DIP STICK										
OIL FILTER										
OIL DRAIN HOSE										
RADIATOR DRAIN HOSE										
AIR CLEANER ELEMENT										
FAN BELT										
BATTERY										

WEIGHT DATA WITH EMPTY BASE/TANK (SEE NOTE 5)

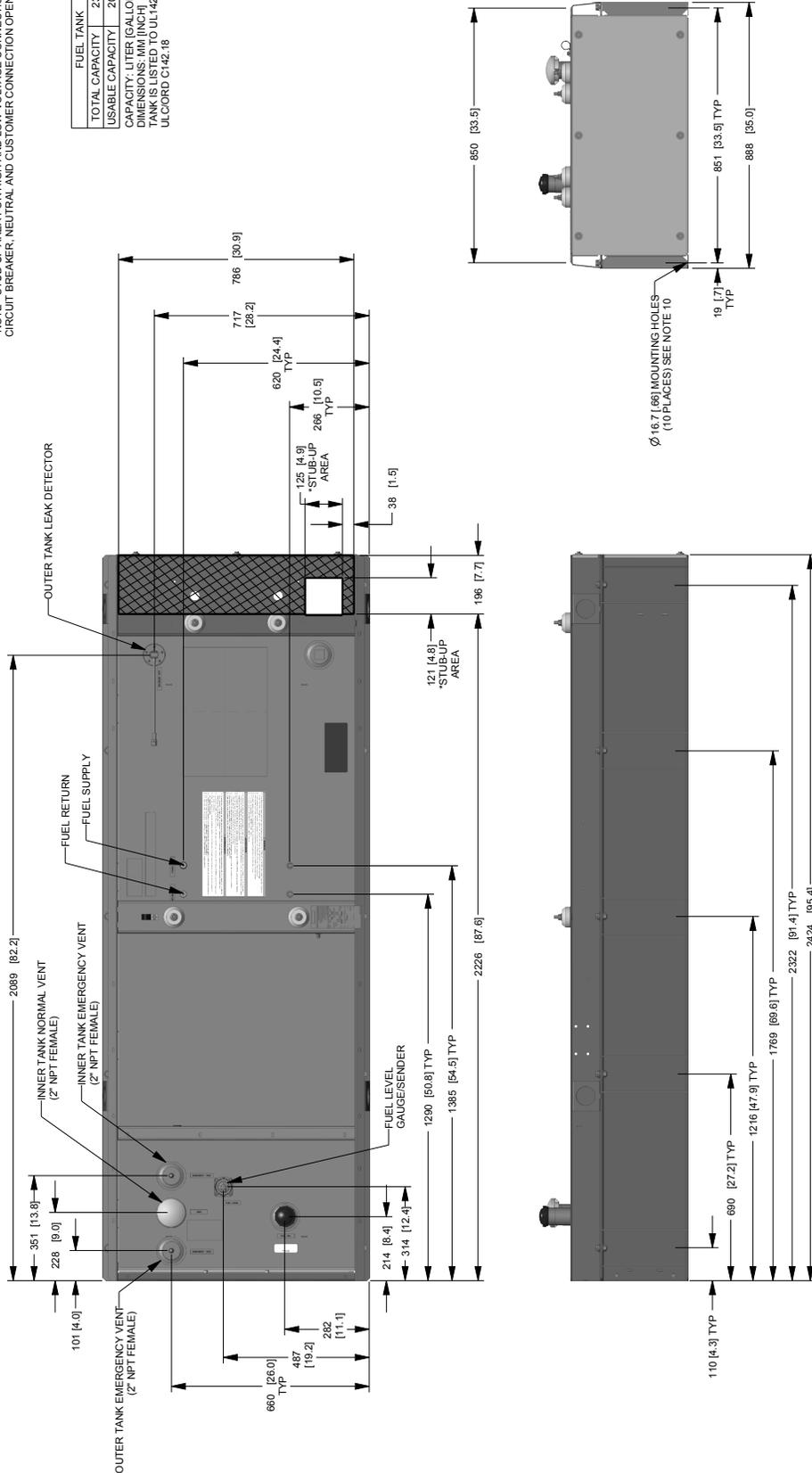
GENERATOR AS SHOWN	826 [1820]
WITH WOODEN SHIPPING SKID	871 [1920]

- NOTES:**
- MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1194 (47") WIDE X 2718 (107") LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT
 - ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODE (NEC) AND LOCAL CODES AS WELL AS ANY OTHER FEDERAL, STATE, AND LOCAL CODES.
 - CONTROL PANEL / CIRCUIT BREAKER INFORMATION:
 - SEE SPECIFICATION SHEET OR OWNERS MANUAL
 - ACCESSIBLE THROUGH CUSTOMER ACCESS ASSEMBLY DOOR ON REAR OF THE UNIT
 - REMOVE THE REAR TANK AND REAR ENCLOSURE COVER PANEL TO ACCESS THE STUB-UP AREAS AS FOLLOWS:
 - HIGH VOLTAGE CONNECTION INCLUDING AC LOAD LEAD CONDUIT CONNECTION
 - NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (0.5 AMP MAX) CONNECTION
 - LOW VOLTAGE CONNECTIONS INCLUDING TRANSFER SWITCH CONTROL WIRES
 - EXHAUST SYSTEM INCLUDING EXHAUST MUFFLER
 - ENGINE SERVICE CONNECTIONS
 - OIL DRAIN, 3/8" NPT
 - EXHAUST OUTLET: 2" O.D.
 - BOTTOM OF GENERATOR SET MUST BE ENCLOSED TO PREVENT PEST INTRUSION AND AIR FLOW THROUGH THE UNIT. PROVIDE SUFFICIENT COOLING AIR FLOW.
 - EXHAUST SYSTEM MAXIMUM BACK PRESSURE: 38 INCHES H₂O.
 - REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
 - MOUNTING BOLTS OR STUDS TO CONCRETE PAD SHALL BE 5/8-11 GRADE 5 (USE STANDARD SAE TORQUE SPECS)

30 kW

*NOTE - STUB-UP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS, CIRCUIT BREAKER, NEUTRAL AND CUSTOMER CONNECTION OPENING.

FUEL TANK	
TOTAL CAPACITY	233 [6.1]
USABLE CAPACITY	203 [5.5]
CAPACITY, LITER (GALLON)	
DIMENSIONS: MM (INCH)	
TANK IS LISTED TO UL142 AND UL308 C142.18	



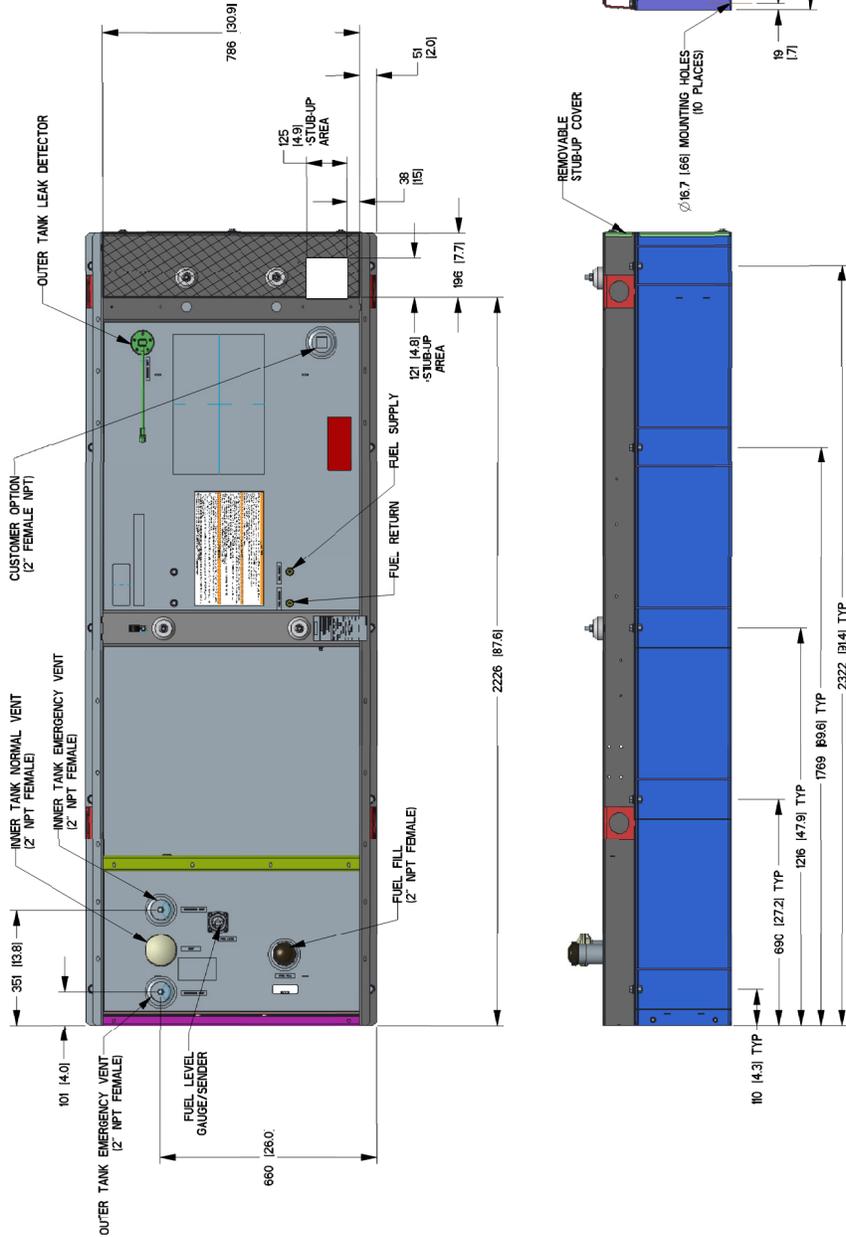
48 & 50 kW

installation layout

Drawing #0K6968-A (2 of 2)

FUEL TANK	
TOTAL CAPACITY	233 [61]
USABLE CAPACITY	209 [55]
CAPACITY: LITER (GALLONS)	
DIMENSIONS: MM (INCH)	
THIS TANK IS LISTED TO UL142 AND ULCS907	

NOTE - STUBUP AREA FOR HIGH AND LOW VOLTAGE CONNECTIONS, CIRCUIT BREAKER, NEUTRAL AND CUSTOMER CONNECTION OPENING.



15 • 20 • 30 • 48 • 50 kW**available accessories**

Model #	Product	Description
G006463-4	Mobile Link™	Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified when a change in the generator's status occurs via e-mail or text message. Note: Harness Adapter Kit required. Available in the U.S. only.
G006478-0	Harness Adapter Kit	The Harness Adapter Kit is required to make liquid-cooled units compatible with Mobile Link™.
G006502-0	Spill Box	The 5-gallon spill box screws into the existing fuel fill port of the base tank. It captures and contains fuel if over fueling or spilling occurs during the fill process.
G006504-0	90% Fuel Level Alarm	The 90% fuel level alarm alerts the fuel fill operator when the tank reaches a 90% fill level by sounding an audible alarm and triggering an LED warning light.
G006505-0 - 15 & 20 kW G006506-0 - 30, 48 & 50 kW	Tank Risers	Tank risers are required in some municipalities to help avoid potential base tank corrosion caused by mounting on rough surfaces.
G006507-0	Fuel Fill Drop Tube	A powder coat painted, steel fuel fill drop tube is required in some municipalities to prevent sparking due to static electricity buildup, which can be caused by the fuel dropping into the tank from the fill area. Using a drop tube also results in submerged filling, which increases the fuel delivery flow rate and reduces vapors, foam and potential tank evaporation.
G006513-0 - 15 & 20 kW G006517-0 - 30 kW G006516-0 - 48 & 50 kW	Stainless Steel Fuel Lines	Some municipalities require the use of stainless steel fuel lines instead of the standard hoses provided with the diesel generator products. These stainless steel lines are fire resistant for additional safety.
G006510-0	E-Stop	E-stop allows for immediate fuel shutoff and generator shutdown in the event of an emergency.
006511-0	Spill Box Drainback Kit	The spill box drainback kit allows fuel that was captured in the 5-gallon spill box to be drained directly back into the fuel tank to avoid vapors.
G006588-1	Vent Extension Support Kit	The vent extension support kit consists of two aluminum plates with the appropriate pipe cutouts to secure the vent extension pipes coming through the top of the generator enclosure. It helps to minimize stress on the NPT fittings integrated on the tank and also helps protect against pests.
G006512-0	Lockable Fuel Cap	The cast iron, lockable fuel cap provides the ability to lock the fuel system to prevent unwanted fuel tampering or fuel siphoning.
G006572-0 - 15 & 20 kW G006571-0 - 30 kW G006570-0 - 48 & 50 kW	Maintenance Kits	The Protector Maintenance Kits offer all the hardware necessary to perform complete maintenance on Generac Protector generators.
G006560-0 - 15 & 20 kW G006559-0 - 30 kW G006558-0 - 48 & 50 kW	Cold Weather Kits	Recommended for generators installed in regions where the temperature regularly falls below 32 °F (0 °C). The Cold Weather Kits consist of a block heater with all necessary mounting hardware and a battery warmer with a thermostat built into the battery wrap.
G005704-0	Paint Kit	If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure.
G006664-0	Local Wireless Remote	Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house.
G006665-0	Wireless Remote Extension Harness	Recommended for use with the Wireless Remote on units up to 60 kW, required for use on units 70 kW or greater.
G006873-0	Smart Management Module (50 Amps)	Manage large loads by utilizing up to 8 individual Smart Management modules. These devices are installed directly in line with existing appliance wiring for easy installation.